

Client Background

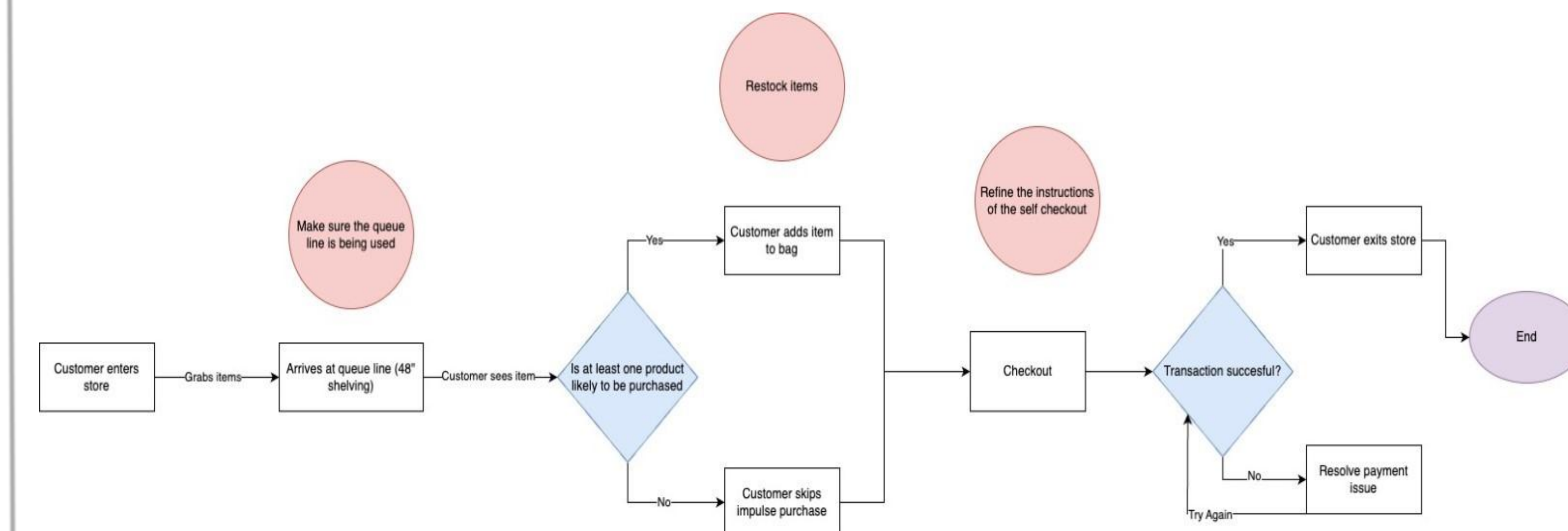
Circle K is a chain of convenience stores where you will be able to get snacks, drinks, groceries, and daily essentials. Bruegmann is a expert in retail merchandising, fixture, and display needs that partners with retailers to provide an improved shopping experience, increasing sales, decreasing shrink, and optimizing space.



Problem Statement

Circle K's queue line shelving is not optimized for sales, efficiency, or customer purchasing behavior. The 42-inch shelving limits product visibility, reduces impulse buys, and restricts inventory capacity. This leads to missed revenue, suboptimal ROI, and inefficient store layout, impacting customer engagement, stocking, and space utilization.

Current System Model



Methods

Customer Satisfaction & Conversion:

- **Survey Design:** 5-point questionnaire on the product visibility, accessibility and overall experience.
- **Qualitative Integration:** Open ended feedback triangulated with queue metrics to see sales and flow results.

Costumer Flow Analysis (M/M/1) queue model.

- Model is used to predict average wait time, queue length, and server utilization, this quantifies whether the extra shelf height affects congestion or throughput.



Return on investments:

Outputs from the queue model, sales analytics in order to compute payback period, and projected ROI for a full roll-out.



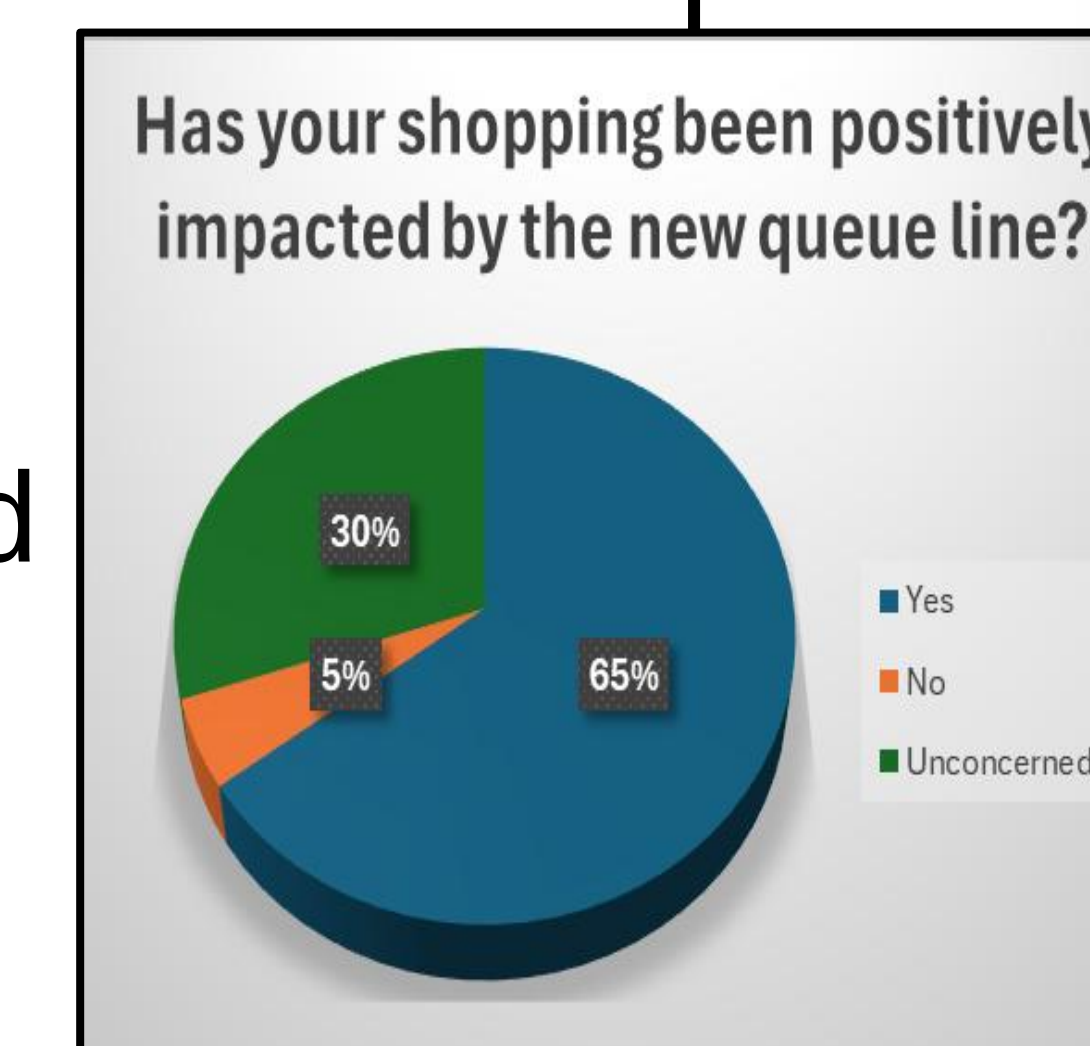
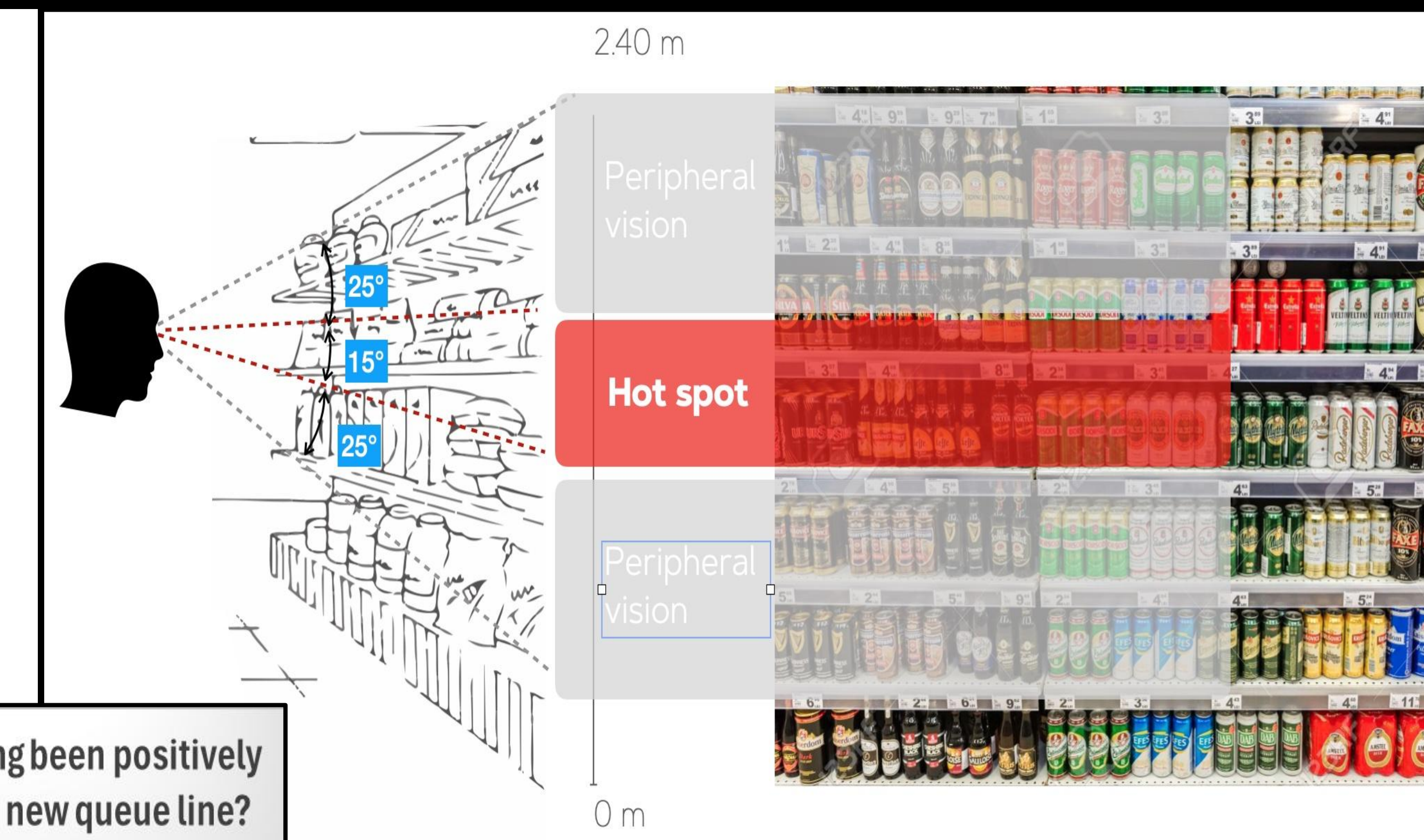
Discussions

- Sales data must be thoroughly analyzed using descriptive statistics to confirm ROI from increased shelf height.
- Customer feedback should be consistently gathered post-implementation to validate perceived improvements in shopping experience.
- Collaboration with store staff is key to ensuring smooth adoption and identifying unforeseen challenges with the new shelving system.

Impact and Results

Operational and Customer Facing Benefits:

- Queue efficiency and customer perception may improve due to better product visibility and accessibility.
- Operational benefits including reduced restocking frequency, improved inventory holding capacity, and labor savings.



Survey Feedback:

Customers responded positively to the increased height of the queue line, noting that the added elevation made them more inclined to engage with and select items

Impact:

Following the installation of taller shelves, individual shopper purchases increased slightly. Daily sales not only rose but also demonstrated greater consistency over time

